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Metropolitanization and State Re-scaling in China: Issues and Challenges of Governance in Chinese Urban Regions

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Abstract

Since the 1978 reforms, city-regions are on the rise in China, and urbanisation is expected to continue as the Central Government intends to further push city development as part of the economic modernisation agenda. City-regions pose new challenges to governance. They transcend multiple local jurisdictions and often involve higher level governments. This paper aims to provide an improved understanding of city-regional governance in China, focusing on three contrasting examples (the Yangtze River Delta Metropolitan Region, the Beijing-Tianjin-Hebei Metropolitan Region, and the Guanzhong-Tianshui Metropolitan Region). We show that, in spite of a strong vertical dimension of city-regional governance in China, the role and interference of the Central Government in matters of metropolitan policy-making is variable.

Introduction[1]

The twin forces of globalization and urbanization have changed the face of the world. All over the planet, the urbanization process has accelerated and cities have grown. In parallel, the spatial form of cities has changed profoundly. The city in the classic sense of a territorially integrated socio-economic entity no longer exists. Global competition for the location of businesses and investments has created pressures towards territorial economic agglomeration, linking localities by movements of people, goods and services. Today's cities are *city-regions*, i.e. large areas of suburban settlement that have sprawled across the administrative boundaries of traditional cities and municipalities. These metropolitan areas will be the context of social economic and political life for a growing majority of the world's citizens in the 21st century (Hoffmann-Martinot and Sellers, 2005).

The rise of city regions is also evident in China since the 1978 reforms. In the last two decades, the proportion of the population living in urban areas has nearly doubled, from 26.4 percent in 1990 to 50.6 percent in 2011 (United Nations, 2012). Some cities have grown to very huge size. Beijing has a population of 19 million, Shanghai is home to 23 million inhabitants, Chongqing counts more than 28 million and is also the world's largest city in terms of surface. Urbanisation is expected to continue in the decades to come, as the Chinese government intends to further push city development as part of the economic modernisation agenda. Estimations project that, by the year 2025, over two-thirds of China's population will live in cities and city regions.

The rise of city regions poses huge challenges to institutions, structures and strategies of governance. City regions typically transcend multiple local jurisdictions, and the size and scope of policy problems therein often requires the involvement of higher level governments. The governance of city-regions is thus distinct from traditional urban or local governance. Against this background, this paper aims to provide an improved understanding of city regional governance in China in the post-1978 reform era. In doing so, we discuss the Chinese

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[1] This paper draws on research activities related to the Institutional Partnership on the topic *Governance and administration of megacities; Chinese and European perspectives,* established, in 2010, between the Graduate School of the Chinese Academy of Social Sciences in Beijing and the Department of Political Science of the University of Zurich, and supported by the Sino-Swiss Science and Technology Cooperation (SSSTC, grant Nr. IP16-092010).

case in the light of scholarly debate on "re-scaling and re-territorialization" (Savitch and Vogel, 2009), i.e. on the re-organisation of territorial state hierarchies as a result of the growth and expansion of urban regions. A prominent position in this debate holds that the workings of globalized capitalism lead to a re-composition of state scales at the level of metropolitan regions (e.g. Brenner, 1999, 2004, Scott, 2001). In the Chinese case, prior research has shown a very prominent role of the central government for the governance of city regions. Drawing on the case of the Pearl River Delta, Ye (2014), for example, holds that city-regional governance in China rests on a top-down, strong and dirigiste model aimed to achieve state objectives. In this paper, we argue that a more fine-grained perspective is needed to accommodate the variety of situations found in the various city regions across China.

In order to do so, we proceed in three steps. We start with outlining the theoretical perspective on governance in city -regions (the debate on the so-called metropolitan governance) and show its relevance in the Chinese context. In the next section, we review the core features of the metropolitanization process in China since the 1978 reforms. In section three, we look at the patterns of governance established in major metropolitan areas since the 1978 reforms, focussing more particularly on three contrasting examples: the Greater Shanghai Metropolis, the Guanzhong-Tianshui Metropolis, as well as the ongoing programme of Beijing-Tianjin-Hebei integration. In the concluding section, we wrap up our findings and conjecture the future development of different models of city-regional governance in China.

1. Governing (Very) Large Cities: Theoretical Considerations

In order to consider the Chinese case, we need to put it in the relevant theoretical context. The question of metropolitan governance, i.e. the area-wide provision of public policies in large urban regions is a classic topic of political science and public administration. However, the extant literature on this topic is mainly based on experiences in OECD countries, and examines city regions that are of far lesser size than the often huge metropolitan regions of China. What are the core theoretical arguments in this debate and which of them are relevant to the analysis of metropolitan governance in China?

1.1 Upscaling the governance of city regions: the long running debate

The establishment of governance capacity on a region-wide scale is generally seen as crucial to enhance a city's competitiveness in an increasingly globalised economy (Savitch and Kantor, 2002). But the question of how exactly this should be achieved has triggered a long

running scientific and political debate. It is basically a debate about the 'best way' to overcome the lack of congruence between the functional space of urban regions on the one hand, and the highly fragmented institutional territories on the other hand. Indeed, metropolitan areas across the world are characterised by "geopolitical fragmentation" (Hoffmann-Martinot and Sellers, 2005), that poses difficulties to addressing policy problems and providing services at the city-regional scale. While there is a basic consensus about the fact that the institutional fragmentation of a city-region constitutes an obstacle to the advent of a city-regional scale of governance, there is substantial disagreement over possible responses. As David Lowery (1999) has argued, this disagreement has sparked one of the longest debates in social science. Running since the early 20th century, this debate has coined three intellectual traditions (for an overview see Savitch and Vogel, 2009, Kübler and Pagano, 2012).

1.1.1 Institutional consolidation as a first answer to problems of fragmented governance

Traditionally, the so called metropolitan reform school has advocated governmental consolidation, whereby institutional boundaries would be brought to match the scale of the functional metropolitan territory. Supporters of institutional consolidation claim that a more centralised and integrated governing system reduces social segregation within metropolitan areas, allow to address the spatial mismatch of expenditure needs and fiscal capacities, as well as ensure the supply of metropolitan-wide policies designed to enhance equity and promote economic growth (Lowery, 2000).

Institutional consolidation can be achieved in three ways. One possibility is the annexation of suburbs by core-cities or city-county consolidation (in the American context). The next possibility is the establishment of a metropolitan wide authority, e.g. a two-tier institution with extensive competencies and autonomy. Such a "Gargantua" would get as many responsibilities as necessary to produce effective and efficient policies, would get adequate resources in funding and staff to do so and would have a political legitimacy by the direct election of its executive. Examples of such metropolitan wide authorities can be seen in the English metropolitan counties created in the 1970s - and abolished a decade later - in some North American cities such as Portland, Minneapolis-St. Paul or Toronto. In a somewhat interpretative way, this could also be the case of the Tokyo Metropolitan Government created in 1947. However, many countries have experienced such institutional creations through less rigid and more varied forms possessing only some of those features. This is the case of the French "Communautés Urbaines" or the more recent "Communauté Metropolitaine" in

Montreal (Canada), the regional governments in Stuttgart and Hannover (Germany), or the Greater London Authority. Yet, political factors (e.g., fear of a loss of control by higher or lower government levels) as well as place identity often fuelled strong resistance against such reforms, resulting in a "long series of disappointing experiments" (Lefèvre, 1998: 13).

A third path towards an institutionally consolidated regional scale of government is for a senior government (e.g. a Province or a federate state) to take over the control of the metropolitan area - a situation that has been described as 'meso-level' metropolitan government (Jouve, 2003). This is the "Australian model" (Sansom and Dawkins, 2013) where, in a context of local government weakness, the major metropolitan areas are mainly run by the state authorities. And there are some rather exceptional cases where the functional territory of a metropolitan area has grown to more or less cover a pre-existing regional level of government that detains adequate resources to control this territory - such as in the case of Madrid with the powerful provincial authority (Rodriguez Alvarez, 2002) or Zurich where the canton has gained control in major metropolitan policy fields (Kübler and Koch, 2008). Generally speaking, however, senior government levels can often play an important role for the governing of metropolitan areas, via the control they retain in important fields such as transport, telecommunications and energy. This is true for instance in New York with the Public Benefic Corporations such as the Port Authority (New York and New Jersey States) or the Empire Development Corporation (New York State) or in Paris where the national government largely controls the airports, public transport, gas and electricity.

1.1.2 Polycentric governance and the benefits of fragmentation

Long dominant in the field, the arguments of the metropolitan reform school as well as the institutional reforms it advocated came under fire from authors writing from the so-called public choice perspective. Formulated mainly as a coherent critique of the metropolitan reform tradition, the public choice perspective argues that "a multi-jurisdictional metropolitan area can be better understood as a complex local public economy than as a maze, a jungle, a crazy quilt, a stew or other metaphor indicating the absence of rational organization" (Parks and Oakerson, 1989: 19). On the one hand, public choice scholars draw on Tiebout's (1956) classic idea of people 'voting with their feet', to argue that the competition between autonomous local constituencies will lead to effective matching of service demands and foster efficiency in the allocation of public services. In order to attract residents and businesses, localities will keep taxes low, provide good services and be responsive to citizens. On the

other hand, the public choice school emphasises the principle of self-governance as localities have strong incentives to adjust relationships and settle conflicts between them (Ostrom et al., 1961). As localities seek efficiency in their providing of public goods, they will engage in schemes of voluntary cooperation in order to realise scale economies (Ostrom, 1983). Area-wide coordination, it is argued, will therefore emerge by itself. The prescriptive implications of the public choice perspective are straightforward: it makes a strong case for institutional fragmentation - rather than consolidation - as well as for self-governance by autonomous localities - rather than centralised government.

Prominent criticisms of the public choice perspective have tended to emphasise inadequacies of the Tiebout model of residential choice and the lack of equity this model produces. More particularly, the idea of individual choice of housing is criticised as "a rather heroic assumption under the conditions of chronic housing shortage" (Kriesi, 2005: 251) especially at the lower end of the market. Recent research in the public choice tradition therefore tends to put less emphasis on residential mobility. For instance, some scholars suggest a distinction between public service provision (i.e., decisions about which goods and services to provide by public means) and production (i.e., transforming input resources to render a service) (Parks and Oakerson, 2000) and emphasise that competition takes place both among provision units (i.e., municipalities) and among production units (i.e., service contractors), the latter being independent from citizens' residential choices.

1.1.3 New regionalism and the third way of metropolitan governance

Does a city-regional scale of governance require institutional consolidation or will it emerge by itself in fragmented contexts? Is centralised government superior to self-governance by autonomous localities? Since the 1950s, the dispute between the metropolitan reform school and the public choice perspective has sparked a myriad of studies aiming to demonstrate the superiority of each approach. But the empirical evidence is inconclusive (Keating, 1995). If anything, the empirical analyses tend to show that the majority of public problems arising in metropolitan areas end up being mediated through coordination and cooperation via formal or informal networks that involve local governments, public agencies from various other levels of government, private actors, but also civil society organisations. A third perspective on regional governance has therefore emerged, focusing on the role of such policy networks in metropolitan governance and has discovered a new regionalism (see Wallis, 1994, Brenner, 2002, Savitch and Vogel, 2000, Savitch and Vogel, 2009).

This third approach is based on the argument that a regional scale of governance - in the sense of coordinating actors to produce public policies at the regional level - cannot only result from hierarchic decision making (metropolitan reform tradition) or competition (public choice tradition), but also via negotiation. It thereby echoes the work on multi-level governance in Europe (e.g. Hooghe and Marks, 2003) emphasising the importance of voluntary cooperation and joint-decision systems as a means to coordinate policy-making across state levels in a context of increasing interdependencies. The new regionalism approach conveys a more relaxed view on the design of territorial institutions. Routes towards new regionalism are thought to be diverse (Savitch and Vogel, 2000): they may include institutional consolidation, but voluntary cooperation among autonomous localities is considered a functional equivalent, as long as it successfully associates relevant actors with the production of policies that enhance international competitiveness.

It is important to note how the scope of the debate has changed with the emergence of the new regionalist perspective. At the onset of the debate, metropolitan areas were seen as self-sufficient systems. Metropolitan reformers and public choice scholars have mainly been concerned with questions of efficiency, effectiveness and equity. For them, capacity of governance in metropolitan areas essentially was about effective area-wide planning, efficient public services, as well as equitable distribution of wealth within single metropolitan areas. New regionalists portend a different view. They stress the context of economic globalisation as the frame through which issues of metropolitan governance must be read. Metropolitan economies, they contend, compete against each other at a global scale, and the essence of metropolitan governance is to provide the critical local assets in order to ensure, maintain and improve competitiveness. Metropolitan areas, new regionalists argue, are not isolated and self-sufficient territorial systems, but they are part of a global order of centrality that is relevant for governance as it creates opportunities for local actors but also imposes restrictions upon them.

Some authors in the strand of new regionalism (e.g. Brenner, 2004) have argued that metropolitan governance capacity is a major issue of globalised capitalism. The pressures of globalisation not only result in a reorganisation of governance in a given metropolitan area, but also have implications for the state more generally, as its institutions are increasingly reconstituted at the metropolitan scale. The issue of metropolitan governance has therefore gained a new scope. It is no longer a question of local interest limited to single metropolitan

areas, but relates to changes and developments in the organisation of the wider state apparatus. This involves not only the reorganisation of vertical relationships between urban governments and higher state levels, but also the changed relationship between public and private actors. Metropolitan governance is a topic that increasingly concerns state agencies at the regional, national and even the supra-national level (e.g., the European Union), but also business and civil society actors with vested interests in the global competitiveness of metropolitan economies.

1.2 Relevance for China

The economic and societal transformations in China since the 1978 reforms underscore the relevance of the theoretical debate on metropolitan governance. On the one hand, the economic reforms have entailed successive waves of decentralization of decision-making power: property rights were decentralized to local governments which, thereby, gained considerable clout in intergovernmental relations. Some observers have even described the current situation as de facto *federalism* with negotiations between the centre and the sub-national entities being a core element of Chinese politics (Zheng, 2006), not least due to strengthened administrative capacity at the levels of sub-national governments (Guo, 2007). In spite of its one-party regime, the Chinese state is no longer as monolithic as it was during the pre-reform era (Shi, 2008: 252): administrative, governmental and also political fragmentation has increased. On the other hand, the economic reforms have gradually integrated China's economy into global exchanges, leading to unprecedented demographic and economic growth of the country's city regions, as the main locations of economic production and social reproduction. Indeed, the capacity to govern these city regions has been important for the country's development since the reforms, and will continue to be crucial in the future. How does metropolitan governance work in China's growing and increasingly fragmented urban regions?

2. The Metropolitanization Process in China

Before we can address this question, we have first to review the metropolitanization process in China since the 1978 reforms, on the basis of quantitative evidence. What are the core features of China's metropolitan regions today? We show that metropolitan growth has proceeded at a phenomenal pace and China's major metropolitan regions have now joined the

global urban hierarchy. Their exceptional features are an immense size and scope, as well as an extremely rapid pace of development (see Savitch et al., 2014).

[*Table 1 about here]*

Table 1 presents a seven-grade global urban hierarchy with number of cities increasing along with the progression in grades. Among it, the four metropolises on China's mainland, namely, Shanghai, Beijing, Guangzhou and Shenzhen belong to Grades 2, 3, 6 and 7 respectively. Their gaining of global status is closely related to China's reform and opening up policy since 1978. Shanghai used to be one of the most important metropolises in East Asia up to 1940s. The reform and opening up, especially the policy of developing Pudong in early 1990s injected new vitality to this old municipality that lagged behind its Asian peers from 1950s onward. Beijing and Guangzhou earned their current statuses completely due to China's rapid urbanization process in step with its economic miracle of becoming the world second largest economy in a matter of three decades. They have been upgraded from China's huge mega-cities to global metropolises. Shenzhen's story is more telling. Until late 1970s, it remained a small fishing village, unmarked on the map. Since it was designated as one of China's four Special Economic Zones, it has expanded phenomenally to a global metropolis of about 15 million residents in 2012. In general, most of China's metropolises have attained their current status in a very short span of time and displayed some characteristics different from most global metropolises of other countries (Savitch et al., 2014: 155-161), such as:

(1) Size and Scope: While the typical advanced nation has one or two very large cities, China contains fifteen cities whose population exceeds two million and thirteen megacities in excess of 5 million inhabitants.

(2) Size, Scope and Growth: While most cities at the top of the urban hierarchy are well established and the product of mature economies, the growth of Chinese cities has been exceptionally swift—even remarkable.

(3) Development: While almost all of the top 25 cities on the global urban hierarchy can be described as service sector, consumption cities, Chinese cities are heavily oriented toward manufacture and developmental policies.

(4) Development and State Directed Capitalism: While almost all of the top 25 cities on the global urban hierarchy can loosely be described as hosting capitalist economies,

China remains a mixed system of "state directed capitalism" which is extremely dynamic.

(5) One Party Government: While the political systems of most global cities are liberal/pluralist, Chinese cities are governed within the framework of a one (Communist) party system.

(6) One Party Government and Many Variations: Within a one party framework local government is quite varied and adaptable to the circumstances at hand. Relations between all governments run along vertical and horizontal lines are subject to cross pressures.

A further view at China's metropolitanization, it is notable that although it is indeed influenced by globalization, such influence is secondary, however. It is more driven by domestic factors, especially by the Chinese government. Compared to the impact of globalization on China's urbanization process, the impact of China's metropolitanization on the global urban hierarchy is greater. The experience of China's rapid urbanization has aroused world attention. But whether and to what extent this experience can be learned by other developing countries remain a question to be debated.

In light of the urbanization processes in many countries in the world, three categories of government role can be identified. First, the central government plays a dominating role; Second, the local government plays an important role under the guidance of the central government; Third, the local government plays a dominating role. The experience of the main developed countries tends to highlight the third category. For example, in the United States, local government dominated the planning and development of most metropolises including New York, Chicago and Los Angeles. In China, the first two categories are popular. Presently, the Central Government dominates the Beijing-Tianjin-Hebei integration process while the Central Government has mainly played a role of guider in the Yangtze River Delta urban sprawl, where local governments mainly resort to negotiations to improve the joint governance capability. Before further elaborating on this point, let's have a closer look at the development of China's metropolises in recent decades.

[*Table 2 about here]*

Table 2 shows that of the 14 metropolises on China's mainland, Harbin is the largest in terms of territory (53,100 km2) while Shenzhen is the smallest (2,050 km2); Chongqing is the most

populous (28,846,170; 2010figure) while Harbin is the least (3,132,000; 2010 figure). But all of them are far larger than their Western counterparts in terms of either population or territory. More specifically, the two Western megacities, Greater London and consolidated New York City respectively hold 1,572 km2 and 782 km2. The populations for each of these Western cities are 8 million—less than half as much as that of Shanghai and Beijing. (Savitch, 2013)

In terms of population growth, figures for 2010 for the 13 cities out of 14 were twice to five times those of 1970. Of them, Changchun's growth rate is greatest, from 1.43 million to 7.45 million. Harbin sees the lowest population growth. For the 40 years from 1970 to 2010, its population only increases to 3.13 million from 2.12 million. Compared to the population growth in main cities on China's mainland, that of most Western cities are much slower. For example, London took over 60 years to double its current population. New York City took about 40 years to double its population by climbing above 7 million inhabitants. Paris also waited 40 years before its population doubled at above 2 million. (Savitch, 2013) Further, the gradual population growth of Western cities has been materialized along with the process of modernization, which spans about 200 years. If in light of this historical perspective, the population growth of Chinese cities is really very fast in pace.

According to the founding time, Chinese cities can be divided into four categories: First, ancient cities with a history of more than 1,000 years include Beijing, Wuhan, Guangzhou, Chongqing, Nanjing, Xi'an, Chengdu and Hangzhou; Second, old cities with a history of between 200 and 1,000 years include Tianjin and Shenyang; Third, young cities with a history of between 100 and 200 years include Shanghai, Changchun and Harbin; and Fourth, the new city with a history of less than 100 years is Shenzhen. Even the third and fourth category cities have a population of several millions: Shanghai 23 million, Shenzhen 10.35 million, Changchun 7.45 million and even Harbin with the least population still has 3.13 million. They all exceed many large cities in the West. Shenzhen with a history of less than 50 years has been developed under the dominance of the Central Government. More specifically, it is due to the Central Government's policy of Special Economic Zones. We can also put the population growth in Changchun and Harbin to the category of the Central Government's domination, namely, the policy of revitalizing the old industrial bases in the Northeast. (For more about this policy, see Dong, 2005) The case of the Yangtze River Delta urban sprawl with Shanghai as the centre is somewhat different from the previous three cities in that the local governments have played an active role under the guidance of the Central Government.

[*Table 3 about here]*

Another important factor for analyzing metropolises is economy. From Table 3, we can see for the 1978-2010 period, the six metropolises of Shanghai, Beijing, Tianjin, Wuhan, Guangzhou and Shenzhen have achieved tremendous growth in GDP. Tianjin registers the highest growth rate of 2676 per cent. Even the lowest Wuhan, its growth for the 2000-2010 period is 185 per cent. Such growth rate finds no match in majority of the Western cities.

More importantly, these Chinese metropolises have maintained the high growth rate in the past 30 years, which is unequalled by most of their Western counterparts. This high growth rate is due to the Central Government's policy of reform and opening up. Accompanied by the efforts at decentralization, the municipal governments have become more creative in design measures to implement the central policies. As a result, the municipal economy, society and culture have achieved overall development. In recent decade, another model has been developed in addition to the model of central domination. It is the local government initiative for development under the central guidance. The negotiation is the main mechanism between the cities within a metropolitan region. It allows the entities other than government to participate in the metropolitan governance such as the NGO and private sector. Together with the other two mechanisms of coordination and polycentricism, it augments the governance capacity, which in turn has spurred the heathy development of metropolises.

Presently, compared metropolis to metropolis, the total volume of GPD of the Chinese metropolises is no match of their Western counterparts. As noted previously, the growth rate in GDP of the most Chinese metropolises is unequalled by their Western counterparts. If the Chinese metropolises can maintain such high growth rate in a further period of time, their total volume of GDP is likely to surpass their Western counterparts. But there is a challenge. The GDP of most of Chinese metropolises heavily depends on the manufacture sector, with the rate of contribution of the tertiary sector to the GDP relatively small. China is in a transition period of its industries. The key is to lower the dependence of GDP on the second industry and increase the contribution of the tertiary industry. In this process, if some problems are not dealt with properly, a decrease in GDP growth rate or even in total volume of GDP is very likely to occur. This is the potential risk affecting China's metropolitanization process.

3. The Governance of the Chinese Metropolises

This section looks at the pattern of governance established in major metropolitan regions since the 1978 reforms. On the basis of three contrasting examples (the Greater Shanghai Metropolis or the Yangtze River Delta Metropolitan Region, the Guanzhong-Tianshui Metropolis and the ongoing programme of Beijing-Tianjin-Hebei integration), we show that the Central Government continues to play a strong role not only in governing metropolitan areas in China, but also in promoting and coordinating inter-metropolitan functional integration. Nevertheless, local variations in patterns of metropolitan governance together with decentralized administration have resulted in tug-of-wars between levels of government. This is epitomized, for example, in the changing role of the urban districts. (For more on urban districts, see Dong 2011) In spite of the formally centralized and unitary state structure, Chinese metropolitan governance is characterized by administrative fragmentation.

3.1 An Introduction to China's 10 Main Metropolitan Regions

3.1.1 Yangtze River Delta Metropolitan Region

The Yangtze River Delta is the aggraded valley plain before the river flows into the sea. The area is China's largest economic zone defined by the Central Government as the country's economic centre with strongest comprehensive capability, an important international port in Asia-Pacific regions and an important global advanced manufacturing base. This China's first world class metropolitan region covers a total area of 354,400 km2 under the jurisdictions of Shanghai Municipality and Jiangsu, Zhejiang and Anhui Provinces. The region takes Shanghai as the centre and Nanjing, Hangzhou as the sub-centre, also includes the cities of Wuxi, Changzhou, Suzhou, Yangzhou, Zhenjiang, Ningbo, Wenzhou, Jiaxing, Huzhou, Shaoxing, Jinhua, Zhoushan, Taizhou etc. (Wang and Cao, 2012) The region makes up only 2.1 per cent of China's total territory, but contributes a quarter of China's economy and a quarter of China's added industrial value. The region is striving to become the world number one metropolitan region in 2018.

3.1.2 Pearl River Delta Metropolitan Region

This region is one of the most dynamic economic zones in China and Asia-Pacific region, which uses 30 per cent of the population of Guangdong Province creates 77 per cent of its GDP. The "Greater Pearl River Delta Metropolitan Region" includes Hong Kong and Macao

and has a total economic volume of 120 per cent of that of the Yangtze River Delta Metropolitan Region. The region with the highest degree of urbanization in China also includes cities of Zhuhai, Huizhou, Zhaoqing, Dongguan, Fushan, Zhongshan and Jianmen. (Xinhuanet 2009)

3.1.3 Beijing-Tianjin-Hebei Metropolitan Region

This region is composed of two municipalities directly administered by the Central Government, namely, Beijing and Tianjin and 11 cities of Hebei Province (Shijiazhuang, Zhangjiakou, Qinhuangdao, Tangshan, Baoding, Langfang, Xingtai, Handan, Hengshui, Canzhou and Chengde). It makes up 2.3 per cent of China's total territory and 7.23 per cent of its population. The strategy for the region's development focuses on the two key municipalities and eight sub-central cities. The axis is to be formed with transportation lines between cities and industrial belt along the lines. (Fang et al, 2005)

3.1.4 Shandong Peninsula Metropolitan Region

This region is the key development area of Shandong Province and one of the areas with a large number of cities in North China. It serves as the sea port for the middle and lower reaches of the Yellow River. It is the frontal area of China participating in the Northeast Asian regional cooperation as the province is close to South Korea and Japan. Jinan and Qingdao municipalities are designated as the dual-centre of the region, which also includes Zibo, Weifang, Dongying, Yantai, Weihai and Rizhao cities. These eight cities contribute to 70 per cent of the province's state taxes. (Song and Gao, 2015)

3.1.5 Central Plain Metropolitan Region

The metropolitan region, designated in 2012, is the first in China's inland. Zhengzhou Municipality, capital of Henan Province, serves as its centre, supplemented by two sub-centres of Luoyang and Kaifeng. The region also includes Xinxiang, Jiaozuo, Xuchang, Luohe, Pingdingshan and Jiyuan cities. The region is ready to receive industrial relocation from the developed countries and China's eastern region. It also serves as the middle point for the export of resources from China's western region. (Huang, 2006)

3.1.6 Central and South Liaoning Metropolitan Region

The region takes Shenyang and Dalian Municipalities as centre and includes Anshan, Fushun, Benxi, Dandong, Liaoyang, Yingkou and Panjin cities. These cities are close to each other

geographically and many are large in size. Shenyang is the economic, transportation, cultural and information centres of the Northeast China and the eastern region of Inner Mongolia as well as China's largest heavy industrial comprehensive base. Dalian is an important international navigation centre in the Northeast Asia, the largest port city in the Northeast China and an important tourism city. (Chinagate, 2009)

3.1.7 Middle Reaches of the Yangtze River Metropolitan Region

The region, with Wuhan, capital of Hubei Province, Changsha, capital of Hunan Province and Nanchang, capital of Jiangxi Province as centres, includes Wuhan urban belt, Changsha-Zhuzhou-Xiangtang city group and pan-Puoyang Lake city group. In April 2015, the State Council approved the Development Plan of the Middle Reaches of the Yangtze River Metropolitan Region, the first after the publication of the National Plan for the New-Type of Urbanization (2014-2020). The region is designated as a new pole of China's economic growth, demonstration zone of new-type urbanization and of inland area's opening up. (Huang, 2015)

3.1.8 West Coast of Taiwan Straight Metropolitan Region

This region spans four provinces of Fujian, Zhejiang, Jiangxi and Guangdong. It takes Fuzhou, Quanzhou, Xiamen, Wenzhou and Shantou municipalities as centres and includes other 16 cities. The region aims to increase cooperation with Taiwan to lay a good foundation for China's reunification. (Mao, 2014)

3.1.9 Chengdu-Chongqing Metropolitan Region

The region includes nine cities of Sichuan Province and nine districts and nine cities of Chongqing Municipality. At the national level, this region has been incorporated into the development plan of the Yangtze River Economic Region. In January 2015, the region was designated as a national metropolitan region. (Wu, 2015)

3.1.10 Guanzhong-Tianshui Metropolitan Region

The region takes Greater Xi'an (including Xianyang) as the centre and Baoji as the sub-centre and also includes Weinan, Tongchuan, Shangluo cities and Yangling city group. The region is the most densely populated of the Shaangxi Province and was capital of many dynasties dated back to 4000 years ago. The region boasts of a large number of universities, research institutes and large and medium-sized state-owned enterprises. It is a hub of western China and

occupies an important position in China's regional economic development. (Shaanxi Provincial Government, 2009)

3.2 Further Analysis of the Three Typical Metropolitan Regions

3.2.1 The Yangtze River Delta Metropolitan Region

Some Chinese scholars believe the interaction between the cities within this metropolitan region is based on coordination. More specifically, Shanghai Economic Zone Planning Office" was set up for the Yangtze River Delta in1983, responsible for the coordination of local governments for the regional economic development. In 1996, the system of "Economic Coordination among Cities in the Yangtze River Delta" was created, including 16 city governments under the jurisdiction of Shanghai Municipality and Jiangsu and Zhejiang Provinces. (Zhang, 2004) Since 2000, these 16 cities have had project cooperation in the fields of tourism, science and technology, information and ports. (Zhang, 2004) In 2002, "the Yangtze River Delta Mayors Forum" was inaugurated, marking that the collaboration of the governments of the metropolitan region has entered a substantive stage. (Zhang, 2004) In 2004, the National Development and Reform Commission officially launched the regional planning work of the Yangtze River Delta. In November, 2011, inter-provincial public bus line between Fengjing, Shanghai to Jiashan, Zhejiang was officially opened as a pilot project for the operation of inter-provincial passenger transportation in the Yangtze River Delta. (Deng, Ou and Xing,2015) With the effective work of the regional Coordination Committee, the cities have realized the inter-changeability of the commuter cards. By July 2012, Shanghai, Ningbo, Shaoxing, Huzhou, Taizhou, Changshu cities had realized one card for all. Presently, the Yangtze River Delta City Coordination mechanism is the first and only one in China, which has a permanent office, serving as the secretariat of the joint mayor forum. At its 12th session held in Taizhou City, Zhejiang Province in April, 2012, the mayors reached a consensus to promote the industrial upgrading of the cities in the Yangtze River Delta, make the related industrial transfer to the Anhui-Jiangsu city belt, North Anhui city belt, coastal cities in Jiangsu Province, and Southwest of Zhejiang Province. (Deng, Ou and Xing, 2015) In addition, the standing coordination council of Shanghai Municipality and Jiangsu and Zhejiang Provinces has set up an expert advisory committee to provide policy consultation for the Yangtze River Delta regional integration process, and to further bring into play the cooperation initiative of enterprises and social organizations in the region (Wang and Cao). In its Guiding Opinions on Depending on the Golden Navigation Route to Promote the

Development of the Yangtze River Economic Region in 2014, the State Council mentions for the first time the development plan and strategic positioning of the five metropolitan regions along the Yangtze River and includes Anhui Province in the Yangtze River Delta Metropolitan Region. (Deng, Ou and Xing,2015)

It seems that the Central Government has not played a great role in the establishment and development of the Yangtze River Delta Metropolitan Region while the interactions between cities in the regions are more prominent. But in fact, the role of the Central Government is very important. The regional planning is a national policy as shown, for example, by the aforementioned State Council's guiding opinions in 2014. As the interactions between cities in the region are routine, involving many parties and all kinds of matters, much public and media attention have been attracted to focus on them. But they act within the framework set by the Central Government and the final arbiter of various disputes among cities remains the Central Government. It is in this sense, we put this metropolitan region's operation and development into the category of "local initiative under the guidance of the Central Government" rather than "metropolitanization dominated by the local government".

3.2.2 The Beijing-Tianjin-Hebei Metropolitan Region

The Central Government has played a dominating role in facilitating the Beijing-Tianjin-Hebei regional integration in that it put forward the concept and guideline. In April 2015, the Political Bureau of the Party Central Committee examined and approved the "Outline Plan for the Coordinated Development of Beijing, Tianjin and Hebei", (Deng, Jin and Rao, 2015) which sets its development orientation and implementation strategy. The cities within this metropolitan region will resort to negotiations and consultations for cooperation in specific fields. But in comparison, the role of the Central Government is more fundamental and basic.

Many reasons can be cited to explain why the Central Government would directly guide this region's development. Firstly, Beijing as the national capital city has always received special treatment. Secondly, Tianjin is the economic centre of North China and one of the four municipalities directly administered by the Central Government. Thirdly, Hebei Province, which surrounds Beijing and Tianjin, receives more attention of the Central Government than other provinces. But these reasons seem not sufficient to require the direct involvement of the Central Government. Similar to other metropolitan regions, there do have internal need for inter-city cooperation. In the Yangtze River Delta and Pearl River Delta, economic imperatives spurred voluntary inter-city cooperation. But this has never been the case in

Beijing-Tianjin-Hebei metropolitan region. The main barrier should actually be the equal political weight of Beijing and Tianjin and light-weightier of Hebei, which make cooperation difficult to design and implement. The inferior political and administrative status of Hebei Province can also be reflected in the fact that it does not have a single city carrying a rank of sub-provincial level.

A special feature of classifying Chinese cities is the criterion of administrative rank besides that of population. There are four ranks:

a) Municipalities directly administered by the Central Government. There are four such municipalities of Beijing, Shanghai, Tianjin and Chongqing. Their rank is equivalent to a province or an autonomous region;

b) Sub-provincial level cities. The latest available figure for 2010 is 15. They mainly fall into two categories of some provincial capitals like Nanjing and Shenyang or regional economic centres like Ningbo, Qingdao, Xiamen and Shenzhen. Their rank, half-grade between a province and a prefecture, allows these cities to receive special treatment by the central government comparable to provinces while the prefectural level cities are under the jurisdiction of a provincial government;

c) Prefectural level cities. They totalled 268 in 2010; and

d) County level cities. There were 370 in 2010. All first three kinds of cities can administer them. (Dong, 2011)

Both centrally administered municipalities Beijing and Tianjin are headed by a Political Bureau member respectively until recently. Neither is a dominating regional economic power like Shanghai in the Yangtze River Delta. The remaining partner, Hebei Province, also faces a unique situation not found for any city in other metropolitan regions. It lives under the shadow of the two politically and economically powerful neighbours. Worse is that these two neighbours absorb many of its valuable resources, such a negative impact receiver seems the only one in China. Under such background, it is understandable that the interference of the Central Government is imperative if the regional integration is to be put on the agenda of governance.

In China, the importance of the Central Government is such that there is no room left for the model of the “local government dominated metropolitanization”. Actually most of China’s metropolitan regions as listed previously belong to the model of the “central government

dominated metropolitanization". The only exception of the 10 metropolitan regions is the Yangtze River Delta Metropolitan Region, where local governments play an important role under the guidance of the Central Government. Here a further look at the Pearl River Delta Metropolitan Region is necessary. We categorize it in the model of the "central government dominated metropolitanization". However, if Hong Kong and Macao are not included, it belongs to the "local government domination under the Central Government's guidance". The reason is that Hong Kong and Macao are Special Administrative Regions, their interaction with Guangdong Province must have the consent of the Central Government. Without central authorization, other cities in the region cannot deal directly with Hong Kong and Macao.

3.2.3 Guanzhong-Tianshui Metropolitan Region

Guanzhong-Tianshui Metropolitan Region is located in central Shaanxi Province and south-eastern Gansu Province, including six cities and one district with a total area of 79,800 km2 and a total population of 28.42 million at the end of 2007. The region takes the Greater Xi'an (including Xianyang City) as the centre and Baoji Municipality as the sub-centre and is also composed of Tianshui, Tongchuan, Weinan, Shangluo, Yangling, Qingyang, Pingliang and Longnan cities. (Lan, 2008)

In 2011, Gansu and Shaanxi provinces decided to give priority to cooperation in the field of science and technology in their "Framework Agreement on Implementing the Guanzhong-Tianshui Economic Zone Development Plan". The move marked a new stage in the regional integration, the emphasis of which is placed on constructing "one core, one shaft, three radiation zones" spatial development framework. "One core" refers to the Greater Xi'an Metropolis (including Xianyang); "one shaft" refers to relying on the Longhai Railway and Lian-Huo highway to create the western developed city groups and industry agglomeration belt; and "three radiation zones" refer to the areas along the radially outward traffic trunk from the regional central Metropolis (the Greater Xi'an) and the sub-central Metropolis (Baoji) that are expected to strengthen the economic cooperation with smooth flow and optimal configuration of production factors, push economic development to the north and south wings. The key industrial development is to be focused on mobile communication of the third generation, telecommunication infrastructure and business applications. At the same time, the ring network structure of Guanzhong-Tianshui trunk fibre and digital region will be promoted to realize integration of three networks of radio and television, telecom and mobile. The

digital TV service will be accelerated. In 2014, the State Council published the "Guanzhong-Tianshui Economic Region Development Plan". (Liu and Nan, 2014)

In general, the Guanzhong-Tianshui Metropolitan Region differs from either the Yangtze River Delta Metropolitan Region or Beijing-Tianjin-Hebei Metropolitan Region in terms of the role of government. Compared to the Yangtze River Delta Metropolitan Region, the local governments have played a greater role in the Guanzhong-Tianshui Metropolitan Region. And compared to Beijing-Tianjin-Hebei Metropolitan Region, the Central Government has played a lesser role in the Guanzhong-Tianshui Metropolitan Region. Then, does this mean that the Guanzhong-Tianshui Metropolitan Region presents a fourth model? The response is negative. It still belongs to the model of "the domination of the Central Government". Although the degree of attention paid by the Central Government to it is lower than it pays to the Beijing-Tianjin-Hebei Metropolitan Region, this is just a matter of degree. In fact, its development has seen two important junctures in the recent six years, with the impetus of both comes from the Central Government. In 2009, the endorsement of the State Council of the formation of the Guanzhong-Tianshui Metropolitan Region helped the region to take shape and the reach of consensus among the local governments concerned. In 2014, the State Council's approval and announcement of "the Guanzhong-Tianshui Metropolitan Region Development Plan" led to the current acceleration of the regional integration. It is fair to say that the Guanzhong-Tianshui Metropolitan Region is a new comer and its governance level is lower than both the Yangtze River Delta and Beijing-Tianjin-Hebei Metropolitan Regions. The situation can be attributed to historical factors, China's unbalanced regional policy and environmental and cultural factors, which will be elaborated in the next section.

3.2.4 A Comparison among the Three Metropolitan Regions

The previous analysis reveals that two models have been adopted for the development of the Yangtze River Delta Metropolitan Region and its Beijing-Tianjin-Hebei counterpart, namely, the "local domination under the guidance of the Central Government" and the "domination by the Central Government". At present, the level of development of the Beijing-Tianjin-Hebei Metropolitan Region lags behind that of the Yangtze River Delta Metropolitan Region. The main reasons include the gap between the development level of these two municipalities and one province and lack in coordination between Beijing Metropolitan Area, Tianjin Metropolitan Area and Tangshan Metropolitan Area (in Hebei Province). Although the two metropolitan regions both locate in eastern China, the Yangtze River Delta directly faces the

Pacific Ocean and possesses the golden navigation route of the Yangtze River. These two advantages are lacking in the Beijing-Tianjin-Hebei Metropolitan Region.

The fact that the Yangtze River Delta Metropolitan Region has registered a better development than its Beijing-Tianjin-Hebei counterpart does not necessarily mean the superiority of the model of the "local government domination under the guidance of the Central Government" over the model of the "domination by the Central Government". In fact, at the early stage of the development of the Yangtze River Delta Metropolitan Region, the model was heavily tilted towards the domination by the Central Government. Along with its development, the intensity of the Central Government's role has been gradually reduced, making the model transformed to the current state. The other nine metropolitan regions have all developed under the strenuous guidance of the Central Government. Without such guidance, these metropolitan regions might have formed much later. It seems that China has adopted such a strategy that during the early years of the development of the metropolitan regions, the Central Government plays a dominant role. Once these metropolitan regions have taken shape, the Central Government will gradually reduce direct involvement and allow the local governments to use their own initiative for upgrading coordination and striving for ever-closer integration.

As noted previously, presently the Guanzhong-Tianshui Metropolitan Region is no match to its Yangtze River Delta and Beijing-Tianjin-Hebei counterparts in terms of governance standard. The specific reasons include the following:

Firstly, the historical factor. The Guanzhong-Tianshui Metropolitan Region is located in the north-western China. From the establishment of Xia Dynasty (2070 BC—1600 BC) to the middle period of Tang Dynasty (618－907), Guanzhong-Tianshui region played a very important role in the formation of empires, China's economic development, integration of ethnic groups, cultural system and the domestic and foreign traffic. Beginning from the late Tang Dynasty, the influence of Guanzhong -Tianshui area in China gradually declined. The main reason is that the western minority regimes cut off the overland connection between the Central Kingdom and Central Asia and Europe (namely, the Silk Road). (Du, 2014) In the ensuing dynasties, the socio-economic centre gradually moved eastward and southward. The Silk Road on the Sea was gradually opened up, the economic development of Guanzhong-Tianshui region lagged behind. The East of China became more and more important in the national economy. The gap in development level between the western and eastern regions

increased gradually. In the late Qing Dynasty (1644-1911), the Self-Strengthening Movement began in the coastal areas along the Yangtze River. Shanghai, as one of Chinese cities engaging in foreign trade and settlement of foreign businesses, becomes a modern metropolis much more advanced than other parts of China, including the traditional heartland of Guanzhong-Tianshui region. After the Resistance War against Japanese Aggression broke out in 1937, the nationalist government promoted building of the rear bases of war in China's western regions. With the victory of the War, the political and economic centre moved to the east again. Because of the shortage in funds, economy of the Guanzhong-Tianshui region declined quickly. Meantime, the Greater Shanghai has gained and maintained a dominant position as China's economic centre. Its metropolitan governance enjoys much better conditions. Since the middle Ming Dynasty (1368—1644), Beijing has been China's political centre for most time, which provides a good condition for economic development and formation and upgrading of metropolitan region with it as the centre. (Gao, 2006)

Secondly, China's unbalanced regional policy. After the founding of the People's Republic, the Central Government undertook series of industrial projects in the Guanzhong -Tianshui region, the most significant of which was the "Three Line" construction started in 1964 under the strategy of building many bases in preparation for major foreign invasion. Many large-scale military plants were built in central and western China, mostly in inaccessible mountainous areas. In the1980s, the Central Government adjusted that strategy. As a result, many "Three Line" enterprises in western regions were converted to civilian production or closed. (Li, 2002) Under the policy of reform and opening up, the regional policy was initially tilted to the coastal regions in the east. The Central Government authorized local governments with preferential treatments to overseas investors in terms of tax, credit, foreign trade and investment. From then on, the gap in economic development between the east and west regions quickly widened. In the 1990s, the Central Government launched a programme to develop the western regions by injecting funds for investment in infrastructure and ecological improving projects. (Liu,Wang and Hu,2009) But the differences between the western regions including the Guanzhong-Tianshui region and eastern regions can hardly be reduced in the short term, which even face the possibility of being further widened.

Thirdly, the environmental and cultural factors. The Guanzhong-Tianshui region is located in the northwest inland, the natural environment is severe, ethnic composition is relatively complex, and land and water traffic is inconvenient. These conditions make the region in a

less favourable position to attract foreign investments and investments from other parts of China. The region boasts long history and influence of cultures of Jin Kingdom and Shang Kingdom, however, these are not dominant cultures in China. Further, the senses of modern business and market are not strong enough among the governments, non-governmental organizations and the public in the region. As a result the regional development needs a stronger cultural and theoretical support.

In contrast, both of its Yangtze River Delta and Beijing-Tianjin-Hebei counterparts score much higher in almost all of these aspects.

4. Discussion

China is accelerating the urbanization process, of which the creation and development of metropolitan regions are a key link. For this end, the Central Government has planned for 10 metropolitan regions as discussed previously. This development has changed the pattern of the global metropolitan regions. Achieving governance capacity within these regions will be crucial for the years to come. We have seen that, similarly to the model of "new regionalism" found in Western metropolises, the Chinese model of metropolitan governance also heavily relies on re-harnessing the relationships between existing institutions and governments at various territorial levels, rather than on the promotion of encompassing institutional reforms or merely relying on polycentric self-governance. Similarly, strategic (and political) leadership has been an important component of metropolitan governance in China. And in spite of increased state-fragmentation in the wake of the 1978 reforms, state-led capitalism and one party rule have clearly favoured the role of the central government in these processes. Indeed, a basic characteristic of the Chinese models of metropolitanization is the prominent role played by the Central Government. In the three cases examined in this paper, we found two distinct models of metropolitan governance: "domination by the Central Government" (in both the Beijing-Tianjin-Hebei Metropolitan Region, and the Guanzhong-Tianshui Metroplitan Region), and "local government dominance under the guidance of the Central Government" (in the Yangtze River Delta Metropolitan Region).

In either two of the models adopted in China, the role of the Central Government is conspicuous. In this sense, our case studies of the three metropolitan regions confirm previous assertions of "state-led metropolitan governance" as identified by Ye (2014) in his study of the Pearl River Delta. We therefore find an important vertical dimension to metropolitan

governance that is more present in the Chinese context than in most Western examples.[2] However, the ways in which the influence of the Central Government plays out varies. In this sense, the two models differ in that in the model of domination of the Central Government, its role is indispensable while in the model of the "local government dominance under the Central Government's guidance", it sets the policy guideline and operation framework, allowing the local governments to cooperate through various means of negotiation and consultation. Here the role of the Central Government is very important and is likely to adjust its intensity of interference.

What are the implications of this situation for future developments of China's metropolitan regions? On the one hand, a certain degree of decentralized metropolitan policy-making creates favourable conditions for policy innovation and responsiveness. On the other hand, administrative fragmentation creates new openings in the structure of political opportunities and thereby results in a more meaningful participation of citizens and stakeholders. As the degree of central involvement may change along with the leadership changes, it is difficult to ascertain the juncture when the Central Government will reduce its interference and give local governments more room for manoeuvre. In this sense, the attempt to set up a prediction based on data to predict when the Central Government will allow the local governments to play a greater role is difficult. Even such a model is constructed, there is no guarantee that the Central Government will use it. As the relevant decision is made subjectively by the central leadership rather than completely based on the objective data. Nevertheless, it can be envisaged that along with the development of these metropolitan regions, the Central Government will gradually reduce its direct involvement and allow the display of local initiatives.

[2] However, this finding echoes some of the conclusions resulting from studies of governance patterns in very large Western metropolitan regions, such as Paris, London and Tokyo, where national governments also play a key role (Kantor et al., 2012).

References

Chan, Kam Wing (2013), "Misconceptions and Complexities in the Study of China's Cities: Definitions, statistics, and implications". *Eurasian Geography and Economics* 48 (4): 383-412.

Brenner, N. (2002) Decoding the newest 'metropolitan regionalism' in the USA: a critical overview. *Cities,* 19**,** 3-21.

Brenner, N. (2004) *New state space: urban governance and the rescaling of statehood,* Oxford, Oxford University Press.

Chinagate (2009), Central and South Liaoning City Group and its Competitiveness, March 9, 2009, www.chinagate.com.cn, accessed on August 10, 2015.

Deng, Jin and Rao, (2015), "The Beijing-Tianjin-Hebei Coordinated Development Plan Outline Approved," New Beijing News, May 1, 2015, http://so.xinanmen.com/?a=url&k=b6c75030&u=aHR0cDovL3BvbGl0aWNzLnBlb3BsZS5jb20uY24vbi8yMDE1LzA1MDEvYzEwMDEtMjY5MzUwMDYuaHRtbA==&t=5Lqs5rSl5YaA5Y2P5ZCM5Y!R5bGV6KeE5YiS57qy6KaB6I636YCa6L!HLS3ml7bmlL8tLeS6uuawkee9kQ==&s=5Lqs5rSl5YaA5Y2P5ZCM5Y!R5bGV6KeE5YiS57qy6KaB, accessed on August 20, 2015.

Deng, Yuanhui, Ou Guoli and Xing Husong, "The formation and Evolution of City Groups: An Analysis based on the Eco-geography," *Science & Technology Progress and Policy*, (6):45-50.

Dong, Lisheng (2005) "China's Drive to Revitalize the Northeast," *China Perspectives*, No. 58 (March-April 2005), pp. 32-42.

Dong, Lisheng (2011) "Metropolitanization with Chinese Characteristics--the Socio-political Transformation of the Chinese Metropolises in the Era of Reforms," paper presented at the conference on *Governance Issues in Megacities: Understanding Chinese and European Examples*, Zurich, August21-26, 2011.

Dong, Lisheng (2012) "Urban Districts in China: A Level of Government in Search for an Identity" paper presented at *International Conference on Governance Issues in Megacities: Chinese and International Perspectives*, Beijing, October 9-10, 2012.

Du, Yufen (2014) "An Analysis of the Silk Road under the Macro-historical Perspective of Han and Tang Dynasties," *Journal of Chifeng Institute (Social Sciences Edition)*, (3):15-17.

Fang Chuanlin, Song Jitao, Zhang Qiang and Li Ming, (2005) "The Formation, Development and Spatial Heterogeneity Patterns for the Structures System of Urban Agglomerations in China," *Journal of Geographical Sciences*, Vol. 60, No. 5, pp. 827-840.

Gao, Fushun (2006) "The Inner Factors for Changan and Beijing to Become the Capital Cities of the Early and Late Feudal Societies," *Social Science Front*, (4):135-138.

Globalization and World Cities (GaWC) at http://www.lboro.ac.uk/gawc/world2010t.html, accessed on August 10, 2015.

Guo, D. (2007) Chinese model of political development: compartaive perspective. *The journal of east asian affairs***,** 117-135.

Hoffmann-Martinot, V. & Sellers, J. (Eds.) (2005) *Metropolitanization and political change,* Opladen, Verlag für Sozialwissenschaften.

Hooghe, L. & Marks, G. (2003) Unraveling the central state, but how? Types of multi-level governance. *American Political Science Review,* 97**,** 233-243.

Huang Da, (2006) "Central Plain Metropolitan Region Development General Plan Published, Functions of Nine Cities Designated," Central China News Website, http://www.zynews.com, June 13, 2006, accessed on August 10, 2015.

Huang Min (2015), "Middle Reaches of the Yangtze River City Group Endorses 31 Cities and Barriers of Residence Registration to be Removed," http://finance.people.com.cn/n/2015/0417/c1004-26859661.html, accessed on August 10, 2015.

Jouve, B. (2003) Les formes du gouvernement urbain en Europe. *DISP,* 152.

Kantor, P., Lefèvre, C., Saito, A., Savitch, H. V. & Thornley, A. (2012) *Struggling giants. City-region governance in London, New York, Paris and Tokyo,* Minneapolis, University of Minnesota Press.

Keating, M. (1995) Size, efficiency and democracy: consolidation, fragmentation and public choice. IN Judge, D., Stoker, G. & Wolman, H. (Eds.) *Theories of urban politics.* London, Sage.

Kriesi, H. (2005) Economics and politics: towards a dialogue between economics and political science. *Swiss political science review,* 11**,** 249-268.

Kübler, D. & Koch, P. (2008) Re-scaling network governance. The evolution of public transport management in two Swiss agglomerations. *Flux. International scientific quarterly on networks and territories,* 72-73**,** 108-119.

Kübler, D. & Pagano, M. A. (2012) Urban politics as multi-level analysis. IN Clarke, S. E., John, P. & Mossberger, K. (Eds.) *The Oxford handbook of urban politics.* Oxford, Oxford University Press.

Lan, Senwei (2008) "Guanzhong-Tianshui, A Handshaking from the Northwest," *China Report*, (5):66-67.

Lefèvre, C. (1998) Metropolitan Government and Governance in Western Countries: A Critical Review. *International Journal of Urban and Regional Research,* 22**,** 9-25.

Li, Caihua (2006) "A Historical Review of the Adjustment and Renovation of the Three-Line Constructions," *Contemporary China History Studies*, (4):43-51.

Liu, Guanghua and Nan Haoyuan (2014) "A Study of the Legal Issues Related to the Implementation of Regional Economic Development Plans," *Journal of China University of Mining and Technology (Social Sciences Edition)*, (2):29-35.

Liu, Shenglong, Wang Yahua and Hu Angang (2009) "Results of the Development of the West Programme and Moderation of Regional Economy in China" *Economic Research*, 94-104.

Lowery, D. (1999) Answering the public choice challenge: a neoprogressive research agenda. *Governance,* 12**,** 29-55.

Lowery, D. (2000) A transactions costs model of metropolitan governance: allocation versus redistribution in urban america. *Journal of public administration research and theory,* 10**,** 49-78.

Mao Yanwu (2014) "Construction of the West Coast of Taiwan Straight City Group," http://www.urbanchina.org/n/2014/0828/c369544-25558003.html, accessed on August 10, 2015.

Ostrom, E. (1983) A public choice approach to metropolitan institutions: structure, incentive and performance. *Social science journal,* 20**,** 79-96.

Ostrom, V., Tiebout, C. M. & Warren, R. (1961) The organization of government in metropolitan areas: a theoretical inquiry. *American political science review,* 55**,** 831-842.

Parks, R. B. & Oakerson, R. J. (1989) Metropolitan organization and governance: A local public economy approach. *Urban affairs quarterly,* 25**,** 18-29.

Parks, R. B. & Oakerson, R. J. (2000) Regionalism, localism, and metropolitan governance: suggestions from the research program on local public economies. *State and local government review,* 32**,** 169-179.

Rodriguez Alvarez, J. M. (2002) Madrid. le pilotage politique par la région. IN Jouve, B. & Lefèvre, C. (Eds.) *Métropoles ingouvernables: les villes européennes entre globalisation et décentralisation.* Paris, Elsevier.

Sansom, G. & Dawkins, J. (2013) Australia: Perth and South East Queensland. IN Slack, E. & Chattopadhay, R. (Eds.) *Governance and finance of metropolitan areas in federal systems.* Don Mills (Ontario), Oxford University Press.

Savitch, H.V.(2012), "The Exceptionalism of Chinese Cities in a Global Context," paper presented at the International Conference on *Governance Issues in Megacities: Chinese and International Perspectives*, Beijing, 9-10 October, 2012.

Savitch, H. & Vogel, R. K. (2000) Paths to new regionalism. *State and local government review,* 32**,** 158-168.

Savitch, H. & Vogel, R. K. (2009) Regionalism and urban politics. IN Davies, J. S. & Imbroscio, D. L. (Eds.) *Theories of urban politics.* 2 ed. London, Sage.

Savitch, H. V., Gross, J. S. & Ye, L. (2014) Do Chinese cities break the global mold? *Cities,* 41**,** 155-161.

Savitch, H. V. & Kantor, P. (2002) *Cities in the international marketplace. The political economy of urban development in North America and Western Europe,* Princeton/Oxford, Princeton University Press.

Shaanxi Provincial Government (2009), "The Shaanxi Provincial Government Notice on Issuing the 'Guanzhong City Group Construction Plan'" (No. 2, 2009), http://so.xinanmen.com/?a=url&k=9e9e5b2d&u=aHR0cDovL3d3dy5zaGFhbnhpLmdvdi5jbi8wLzEwMy82NDE4Lmh0bQ==&t=6ZmV6KW@55yB5Lq65rCR5pS@5bqc6Zeo5oi3572R56uZ&s=5YWz5Lit5Z!O5biC576k5bu66K6!6KeE5YiS, accessed on August 20, 2015.

Shi, F. (2008) Social capital at work: the dynamics and consequences of grassroots movements in urban China. *Critical asian studies,* 40**,** 233-262.

Song Jianjun and Gao Mingjun, Shandong Peninsula Metropolitan Region Aims at Equalling with the Yangtze River Delta and Pearl River Delta Metropolitan Regions, *China Urbanization Website*, http://www.curb.com.cn/pageshow.asp?id_forum=006117, accessed on August 10, 2015.

Tiebout, C. M. (1956) A pure theory of local expenditures. *Journal of Political Economy,* 44**,** 416-424.

United Nations (2012) *World Urbanization Prospects. The 2011 Revision,* New York, United Nations: Economic and Social Affairs.

Wallis, A. D. (1994) The third wave: current trends in regional governance. *National civic review,* 83**,** 290-310.

Wang, Shaoquan and Cao, Dongying (2012) "The Relationship among Network Governments in Metropolitan Governance," paper submitted to the International Conference on

Governance Issues in Megacities: Chinese and International Perspectives, Beijing, 9-10 October, 2012.

Xinhuanet (2009) "The Official of the State Development and Reform Commission Says the Greater Pearl River Delta has Become the World No. 3 Metropolitan Region", http://www.sina.com.cn February 1, 2009.

Wu Lumu (2015), "Sichuan and Chongqing Jointly Construct a Metropolitan Region," Economic Daily, http://invest.people.com.cn/n/2015/0529/c75552-27075140.html, accessed on August 20, 2015.

Ye, L. (2014) State-led metroplitan governance in China: making integrated city-regions. *Cities,* 41**,** 200-208.

Zhang, Jianhua (2004) A Study of the Economic Development in the Greater Shanghai Metropolitan Region, PhD thesis approved by Fudan University, 1-173, 2004.

Zheng, Y. (2006) Explaining the sources of de facto federalism in reform China: intergovernmental decentralization, globalization, and central-local relations. *Japanese Journal of Political Science,* 7**,** 101-126.

6. Tables

Table 1：The Global Hierarchy of Cities: 2010

No.	Alpha++	Alpha+	Alpha	Alpha-	Beta+	Beta	Beta-
1.	London	Hong Kong	Milan	Miami	Dusseldorf	Budapest	Abu Dhabi
2.	New York	Paris	Beijing	Dublin	Stockholm	Beirut	Nicosia
3.		Singapore	Toronto	Melbourne	Prague	Luxembourg	Birmingham (UK)
4.		Tokyo	Sao Paulo	Zurich	Montreal	Guangzhou	Rio De Janeiro
5.		Shanghai	Madrid	New Delhi	Rome	Seattle	Brisbane
6.		Chicago	Mumbai	Munich	Hamburg	Caracas	Geneva
7.		Dubai	Los Angeles	Istanbul	Manila	Ho Chi Minh City	Calcutta
8.		Sydney	Moscow	Boston	Houston	Auckland	Detroit
9.			Frankfurt	Warsaw	Berlin	Oslo	Denver
10.			Mexico City	Dallas	Athens	Kiev	Monterrey
11.			Amsterdam	Vienna	Tel Aviv	Chennai	Bratislava
12.			Buenos Aires	Atlanta	Bangalore	Bucharest	Port Louis
13.			Kuala Lumpur	Barcelona	Copenhagen	Manchester	Casablanca
14.			Seoul	Bangkok	Cairo	Karachi	Manama
15.			Brussels	Taipei	Bogota	Lima	Stuttgart
16.			Jakarta	Santiago	Vancouver	Cape Town	Sofia
17.			San Francisco	Lisbon		Riyadh	Cologne
18.			Washington	Philadelphia		Montevideo	St. Louis
19.				Johannesburg		Minneapolis	Helsinki
20.							Panama City
21.							San Diego
22.							Lagos
23.							Perth
24.							Shenzhen
25.							Cleveland
26.							San Juan
27.							Calgary
28.							Guatemala City
29.							Osaka

Source: Globalization and World Cities (GaWC) at http://www.lboro.ac.uk/gawc/world2010t.html
Quoted from Savitch (2012)

Table 2： Population and Area in 15 Chinese Cities: 1970-2010

No.	City	area		number of population				
		sq. km	sq. mile	1970	1980	1990	2000	2010
1	Shanghai	6,340.5	2,448.1	10,816,500	11,859,700	13,341,900	16,407,700	23,019,148
2	Beijing	16,801.3	6,487.0	7,568,495	9,230,687	10,819,407	13,569,194	19,612,368
3	Tianjin	11,760.0	4,540.0	N/A	7,764,141	8,785,402	9,848,731	12,938,224
4	Wuhan	8,494.4	3,279.7	N/A	N/A	N/A	N/A	9,785,392
5	Guangzhou	7,434.0	2,870.0	3,031,486	5,630,733	6,299,943	9,942,022	12,700,800
6	Shenzen	2,050.0	790.0	N/A	351,871	1,214,800	7,008,428	10,357,938
7	Shenyang	12,942.0	4,997.0	3,493,000	3,913,000	4,655,000	4,828,000	8,106,171
8	Chongqing	82,401.0	31,815.0	N/A	6,301,000	15,297,000	30,512,763	28,846,170
9	Nanjing	6,598.0	2,548.0	3,605,300	4,358,700	5,018,200	5,448,900	8,004,680
10	Harbin	53,100.0	20,500.0	2,122,000	2,467,000	2,991,000	2,928,000	3,132,000
11	Xi'an	9,983.0	3,854.0	N/A	N/A	N/A	7,410,000	8,467,837
12	Chengdu	2,129.0	822.0	6,922,918	8,225,399	9,195,004	10,392,531	14,047,625
13	Changchun	20,532.0	7,927.0	1,430,000	1,698,000	2,192,000	3,093,000	7,459,005
14	Hangzhou	16,847.0	6,505.0	1,034,000	1,164,000	1,476,000	1,780,000	2,151,000

Source: National Bureau of Statistics of China; Hong Kong Census & Statistics Department; local government websites; Economist Intelligence Unit report; Chan, Kam Wing, 2007. Misconceptions and Complexities in the Study of China's Cities: Definitions, statistics, and implications. *Eurasian Geography and Economics* **48** (4): 383-412. Quoted from Savitch (2012)

Table 3 Gross Domestic Product in 15 Chinese Cities: 1970-2010

No.	City	GDP (US$ Billion) based on PPP					% change	Note on % change
		1978	1980	1990	2000	2010		
1	Shanghai	16.200	20.820	16.342	57.634	253.578	1465	1978-2010
2	Beijing	6.461	9.286	10.47	38.192	208.488	3127	1978-2010
3	Tianjin	4.908	6.911	6.501	20.558	136.265	2676	1978-2010
4	Wuhan	N/A	N/A	N/A	25.489	72.605	185	2000-2010
5	Guangzhou	N/A	N/A	22.703	N/A	95.484	321	1996-2009
6	Shenzen	N/A	N/A	14.935	N/A	91.355	512	1996-2009

Source: Shanghai Basic Information, Beijing Municipal Bureau of Statistics, Hong Kong Census & Statistics Department, Tianjin Statistical Information Net, Statistical Information of Wuhan, National Bureau of Statistics of China, Ailing & Xie.

Quoted from Savitch (2012)